

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: OSGOOD POND	Lake Area (ha): 8.01
Town: MILFORD	Maximum depth (m): 2.2
County: Hillsborough	Mean depth (m): 0.6
River Basin: Merrimack	Volume (m ³): 47500
Latitude: 42°49'15" N	Relative depth: 0.7
Longitude: 71°40'00" W	Shore configuration: 1.79
Elevation (ft): 270	Areal water load (m/yr): 87.90
Shore length (m): 1800	Flushing rate (yr ⁻¹): 148.0
Watershed area (ha): 1460.5	P retention coeff.: 0.25
% watershed ponded: 0.0	Lake type: natural w/dam

BIOLOGICAL:

		20 January 1992	2 August 1991
DOM. PHYTOPLANKTON (% TOTAL)	#1	SPARSE - NO DOMINANT	DINOBRYON 90%
	#2		
	#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)			340
CHLOROPHYLL-A (µg/L)			5.45
DOM. ZOOPLANKTON (% TOTAL)	#1	NONE OBSERVED	SPARSE - NO DOMINANTS;
	#2		HORIZONTAL NET TOW - NO
	#3		CELL COUNTS
ROTIFERS/LITER		<1	
MICROCRUSTACEA/LITER		<1	
ZOOPLANKTON ABUNDANCE (#/L)		<1	
VASCULAR PLANT ABUNDANCE			Very abundant
SECCHI DISK TRANSPARENCY (m)			2.2 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		12.6	4.9
BACTERIA (fecal col., #/100 ml)	#1		200
	#2		15
	#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³) : None
Anoxic volume (m³) : None

CHEMICAL:

Lake: OSGOOD POND

Town: MILFORD

	20 January 1992		2 August 1991		
DEPTH (m)	0.5	1.0	1.0		
pH (units)	6.3	6.3	6.9		
A.N.C. (Alkalinity)	7.6	8.0	9.2		
NITRATE NITROGEN	0.24	0.24	< 0.05		
TOTAL KJELDAHL NITROGEN					
TOTAL PHOSPHORUS	0.011	0.009	0.027		
CONDUCTIVITY (μ mhos/cm)	75.9	74.1	67.4		
APPARENT COLOR (cpu)			45		
MAGNESIUM			0.78		
CALCIUM			3.4		
SODIUM			7.4		
POTASSIUM			0.62		
CHLORIDE	12	11	11		
SULFATE	6	6	3		
TN : TP					
CALCITE SATURATION INDEX			2.9		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1991

D.O. S.D. PLANT CHL TOTAL CLASS

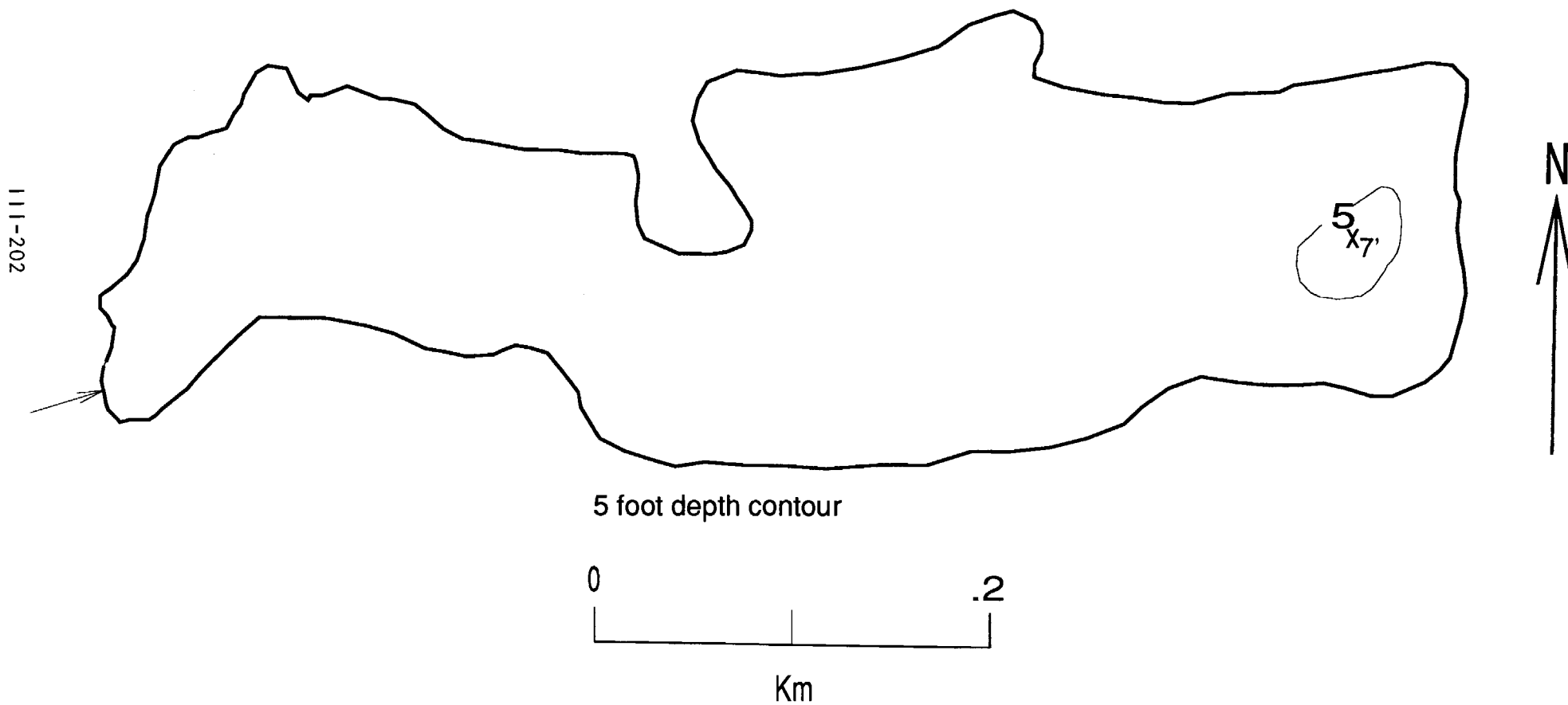
**	2	6	1	9	Meso.
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COMMENTS:

1. Also known as Unnamed Pond.
2. Shallow launch site; unable to use motor because of the very abundant plant growth throughout the pond.
3. Cryptomonas (40%) and Chroomonas (15%) were the dominant genera of whole-water plankton.

Osgood Pond

Milford



[illegible]

WEATHER: SUNNY & HOT

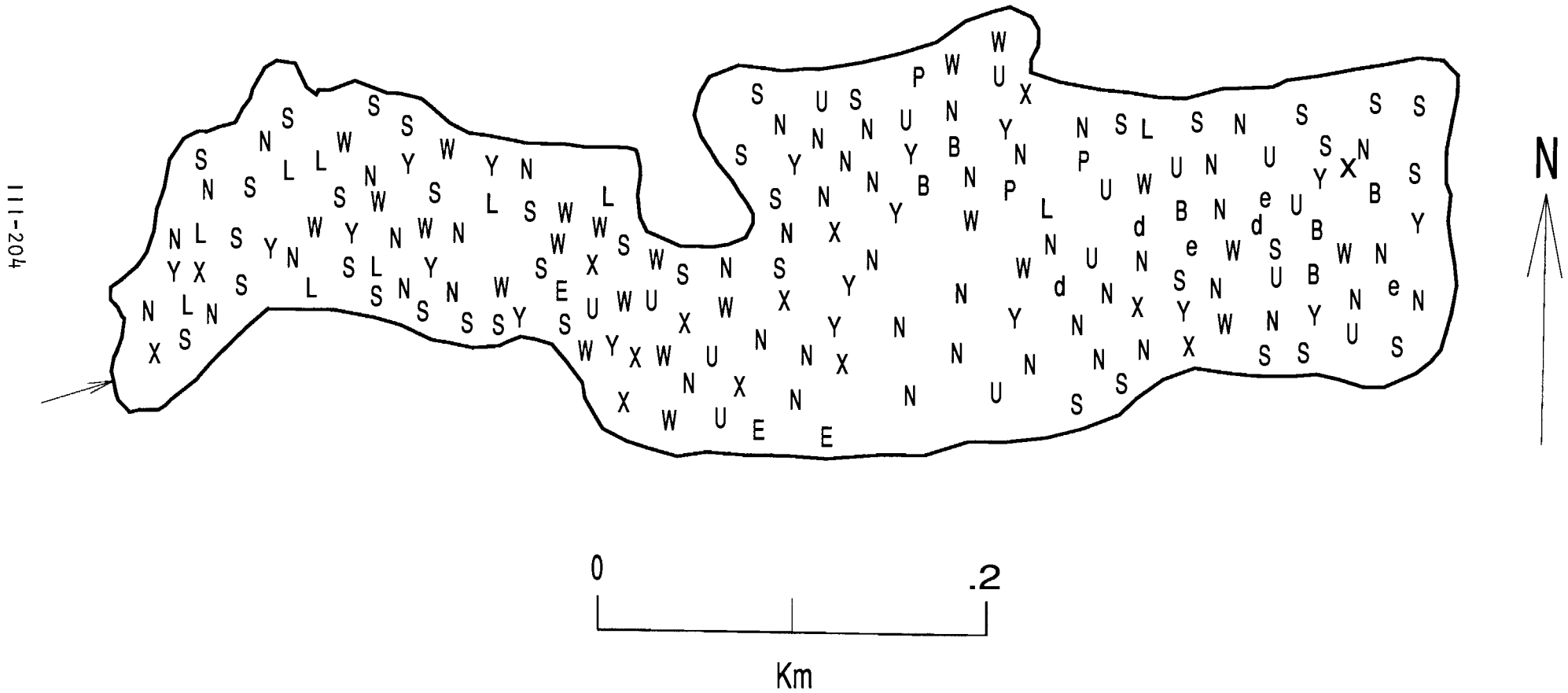
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SECCHI DISK (m):    2.2 VOB      COMMENTS:
BOTTOM DEPTH (m):   2.2
TIME: 1200
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*Dissolved oxygen values are in mg/L

Osgood Pond

Milford



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